

Study finds active workstations may improve cognitive performance

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A recent Mayo Clinic study suggests that active workstations incorporating a walking pad, bike, stepper and/or standing desk are successful strategies for reducing sedentary time and improving mental

cognition at work without reducing job performance. Extended sedentary behavior, whether at work or home, increases a person's risk of preventable chronic diseases.

"Our findings suggest that it is feasible to blend movement with office work that previously would have been done during long periods of sitting. Active workstations may offer a way to potentially improve cognitive performance and overall health, simply by moving at work," says Francisco Lopez-Jimenez, M.D., a preventive cardiologist at Mayo Clinic and senior author of the study.

The research involved 44 participants in a [randomized clinical trial](#) where four office settings were evaluated over four consecutive days at Mayo Clinic's Dan Abraham Healthy Living Center. Study findings are published in the [Journal of the American Heart Association](#). The settings included a stationary or sitting station on the first day, followed by three active workstations (standing, walking or using a stepper) in a randomized order. Researchers analyzed participants' neurocognitive function based on 11 assessments that evaluated reasoning, short-term memory and concentration. Fine motor skills were assessed through an online typing speed test and other tests.

When participants used the active workstations, their [brain function](#) either improved or stayed the same, and their typing speed slowed down only a bit. However, the accuracy of their typing was not affected. The study revealed improved reasoning scores when standing, stepping and walking as compared with sitting.

"Being sedentary is the new smoking when it comes to your cardiovascular health, and [office workers](#) may spend a large part of their eight-hour workday sitting at a computer screen and keyboard."

"These findings indicate that there are more ways to do that work while

remaining productive and mentally sharp. We would do well to consider an active workstation in the prescription for prevention and treatment of conditions like obesity, [cardiovascular disease](#) and diabetes," says Dr. Lopez-Jimenez.

More information: Jose R. Medina-Inojosa et al, Effect of Active Workstations on Neurocognitive Performance and Typing Skills: A Randomized Clinical Trial, *Journal of the American Heart Association* (2024). [DOI: 10.1161/JAHA.123.031228](https://doi.org/10.1161/JAHA.123.031228)

Provided by Mayo Clinic

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